[redacted] 8998-69 25X1
Copy 8 of 13

NRO review completed

17 July 1969

MEMORANDUM FOR: Director, CIA Reconnaissance Programs

SUBJECT: Program Progress Report

Forwarded herewith are Program Progress Reports (5 copies each) for OXCART and IDEALIST for the period 1 April 1969 - 30 June 1969. 25X1

[redacted]

DONALD H. ROSS
Brigadier General, USAF
Director of Special Activities

Attachments -
As stated [redacted] 6447-69 ~~9001-69~~)

25X1
ILLEGIB

[redacted]

25X1

[redacted]

25X1

25X1

SAS/O/OSA [redacted] (11 July 1969)

Distribution:

1 - D/CRP
2 - D/CRP
3 - D/CRP
4 - D/CRP
5 - D/CRP
6 - DDS&T Reg (w/o att.)
7 - D/SA
8 - SAS/O/OSA
9 - D/O/OSA
10 - IDEA/O/OSA
11 - D/M/OSA
12 - R&D/OSA
13 - RB/OSA

25X1

[redacted]

6447-69
~~9001-69~~ 25X1

TAB A, Section 1

OXCART

SUMMARY AND PROGRESS

(1 April 1969 - 30 June 1969)

I. GENERAL

A. OXCART

1. In response to a request from AFIGO-S (Pentagon), Lockheed Aircraft Corporation (LAC) submitted certain A-12 cost data for consideration in the FY-70 and FY-71 NRO budget. The data was submitted in the form of the following options:

a. OPTION I - Continuation of the FY-69 LAC storage effort which assumes that assistance from Pratt and Whitney (engine maintenance) is available from assigned personnel at the Palmdale storage facility.

FY-70	FY-71

25X1

b. OPTION II - Additive costs to bring one A-12 out of storage, prepare for flight and conduct one check flight. This flight would be a high altitude supersonic flight; however, the sensors and INS would be inoperable.

FY-70	FY-71

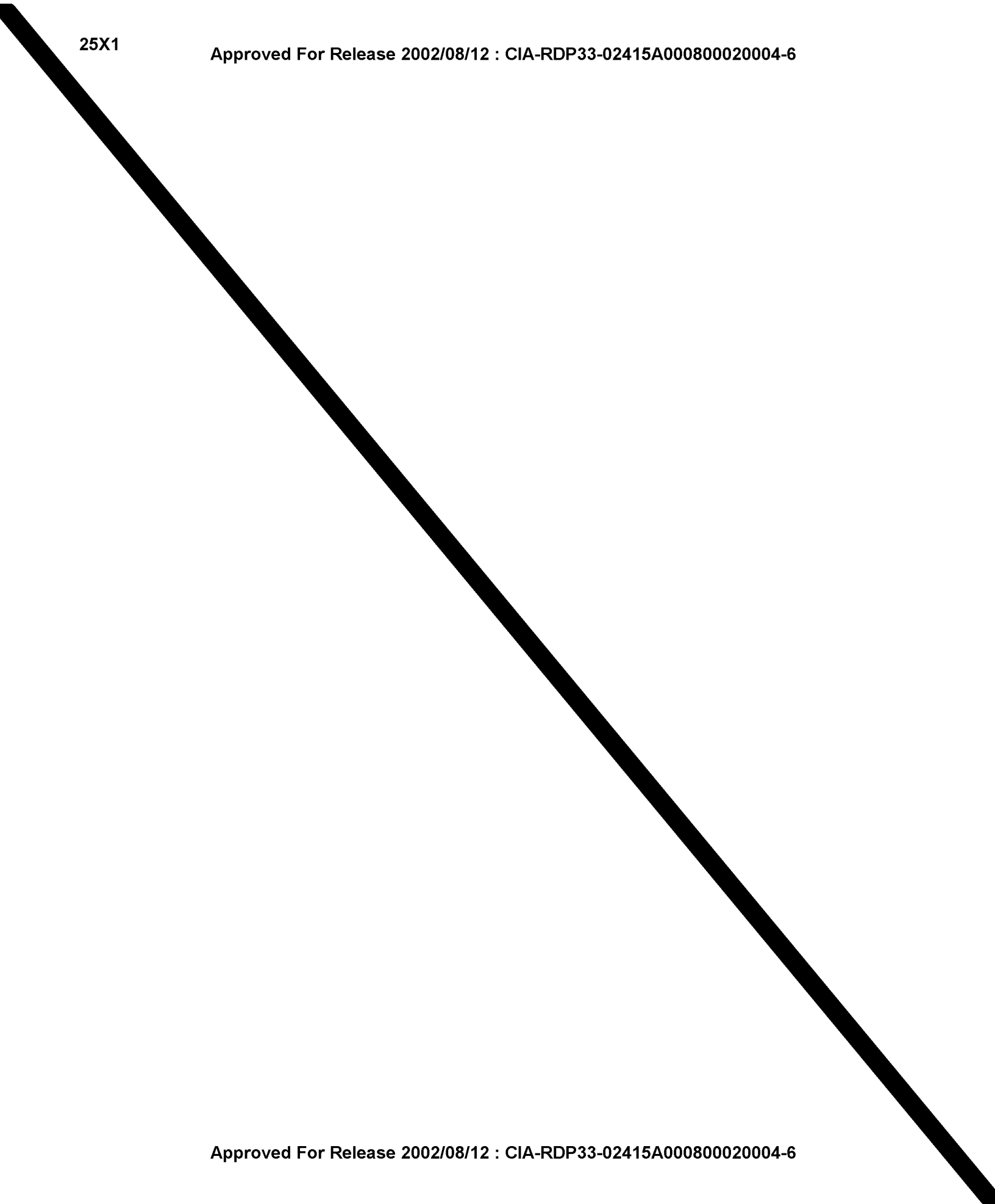
25X1

c. OPTION III - Additive costs to bring four more A-12s to a ready-to-fly condition, but no additional flights beyond the one provided for in OPTION II; i.e. ground run-ups only.

FY-70	FY-71

25X1

25X1



Approved For Release 2002/08/12 : CIA-RDP33-02415A000800020004-6

6447-69
~~9001-69~~

25X1

TAB B, Section 1
~~Page 2~~ 3

IDEALIST

DEVELOPMENT SUMMARY AND PROGRESS

(1 April 1969 - 30 June 1969)

I. AIRFRAME

A. Final U-2R development engineering reports are beginning to be received. These reports are required in order to satisfy the U-2R procurement contract.

B. U-2R FLIGHT TEST AND OPERATIONAL TRAINING SUMMARY (through 30 June 1969)

	A.M.J. FLTS	A.M.J. TIME	TOTAL FLTS	TOTAL TIME
1 - 051	19	49.3	127	386.9
2 - 052	--	--	58	215.0
3 - 053	19	108.1	103	368.4
4 - 054	22	93.2	106	378.3
5 - 055	20	87.0	110	397.4
6 - 056	3	8.5	24	55.6
7 - 057	42	148.1	113	433.8
8 - 058	38	107.2	103	354.9
9 - 059	10	15.6	16	26.6
10 - 060	3	7.1	22	40.6
11 - 061	4	6.8	17	31.8
12 - 062	2	2.7	13	28.4
TOTAL	182	633.6	812	2717.7

25X1

25X1

II. PROPULSION

Three instances of a relatively minor engine instability problem have occurred recently, primarily involving a slight fluctuation of Engine Pressure Ratio which is sometimes accompanied by fluctuations in Exhaust Gas Temperature and RPM. A flight test program to investigate the problem will be formulated and conducted if it is determined to be necessary after a thorough review of all available data and information related to the problem.

III. PAYLOAD

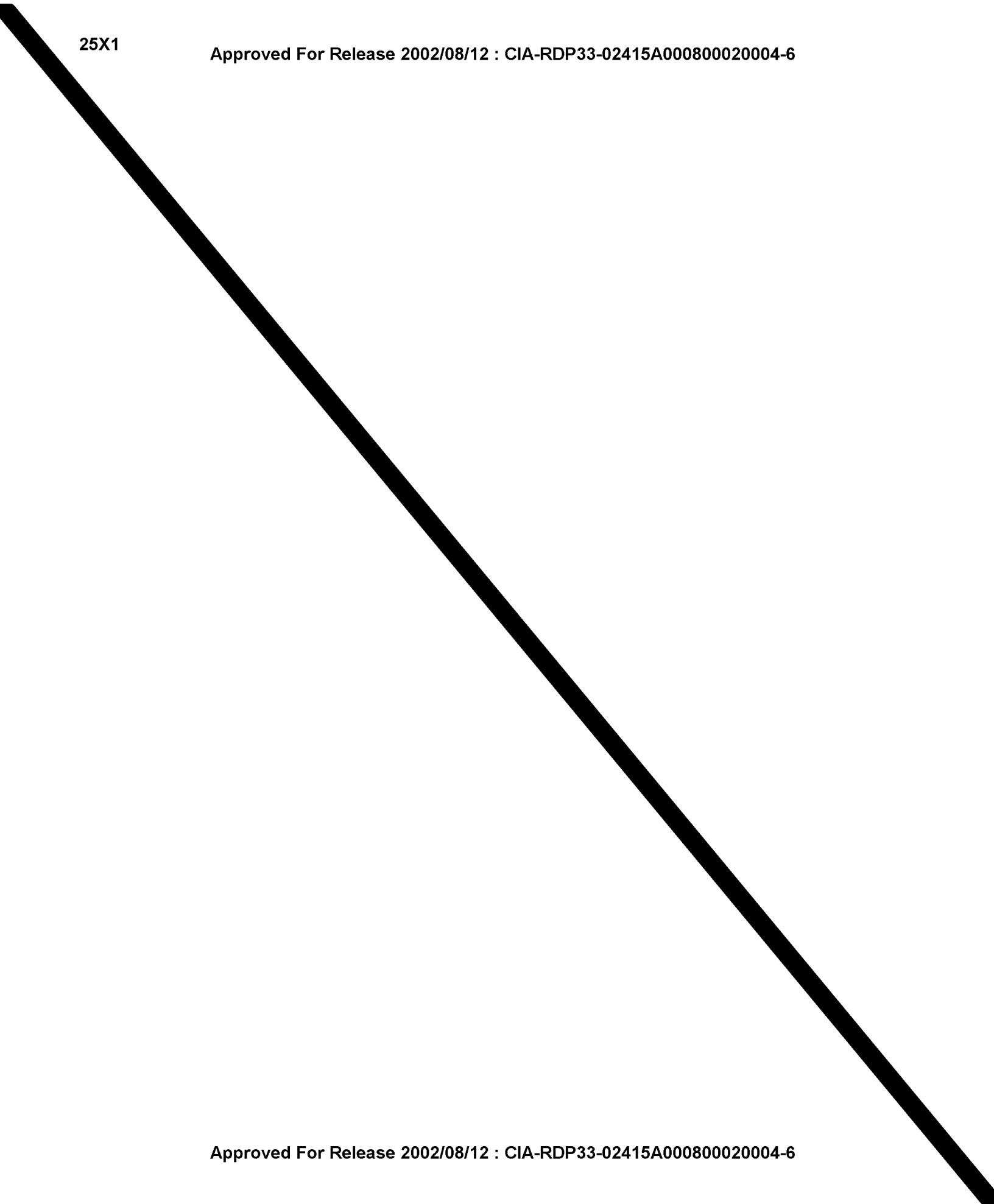
A. IRIS II Configuration - One (1) IRIS II configuration was declared Operationally Ready (OR) and shipped to Detachment H. Two (2) additional IRIS II's are undergoing final tests and will probably be declared OR early in first quarter of FY-70. The fourth IRIS II has had its initial or shakedown flight. The fifth IRIS II was shipped from ITEK plant on 27 June to Detachment G for OR validation.

B. H Configuration - H camera SN-003 completed IRAN in April and was sent to Detachment H for OR validation flights. It has been declared OR. SN-002 was declared OR for use with 3400 film and is now being utilized at Detachment G to test other emulsions in an effort to improve the quality of photography, particularly when the "H" configuration is being used in an oblique mode.

C. Air compressor problems relating to the IRIS II appear to have been resolved, both from the standpoint of reducing vibration originating from the compressor and furnishing an adequate supply of air to the air bars of the IRIS II system.

D. Thermal Stabilization - The ECP for the insulation of upper hatches has been incorporated. The ECP for insulation of the lower hatches is due for delivery to Project Headquarters the last week in June or early July. The ECP for a preconditioning cart also has the same delivery date. One of the camera manufacturers is submitting an unsolicited proposal for a preconditioning cart.

25X1



Approved For Release 2002/08/12 : CIA-RDP33-02415A000800020004-6

attributed to noise spikes generated by the H camera. Modifications to correct the noise problem are being tested by the camera vendor and at Detachment G.

25X1 [redacted]

V. GENERAL RESEARCH AND DEVELOPMENT

A. GENERAL R&D

1. Drag Reduction Program - Since the constraints imposed by a retrofit approach to the U-2R caused a significant reduction in effectiveness, the program was redirected from a retrofit arrangement to an outer panel redesign effort. Almost this entire quarter was spent in improving the [redacted] 25X1 Tunnel to an acceptable level of performance and fabricating models of the modified outer wing panel. A very limited number of data points were obtained at the very end of this reporting period and these data are being analysed. These results will be included in a final program report now being prepared. Upon receipt of this report, the drag reduction program will be terminated unless the results of the final week's effort are significant enough to warrant continuation.

2. High Altitude Relight Program - A final flight test report has been received from Lockheed Aircraft Corporation (LAC) on the high altitude relight program. The LAC Report SP-2089 is titled "High Altitude Airstart Capability with a Modified J75-P-13B Engine." This report confirms the data analysis but places the expected repeatable relight altitude at a more conservative 48,000 ft. altitude with sealed cross-over tubes versus the 50,000 ft. altitude previously established. It confirms the

25X1

recommendation to pursue the sealed cross tubes without oxygen injection. In order to take advantage of the improvements offered by the hardware modification without the complication of the oxygen injection system, it is planned to reoperate all combustor burner cans to the improved relight configuration pending successful completion of a 200 hour flight service test. Two sets of burner cans have been modified by Pratt and Whitney for durability service test and will be installed in engines 612621 and 611319. The cost of modifying sets of burner cans (i.e. to the sealed cross-over tube configuration) for all engines has been estimated by Pratt and Whitney [redacted] per engine with a lead time of about one year. 25X1

[redacted] 25X1

4. U-2R Engine Performance Improvement - Funded studies are now being conducted by LAC on the effects of proposed J75-P-13B engine performance improvements on performance of the U-2R aircraft. The results of these studies will be published by LAC about 30 June or shortly thereafter.

5. General Studies

a. Low Altitude, Quiet U-2R - LAC was awarded a contract to establish background noise criteria for jungle, desert, industrial and sea environments and to investigate the possibility of reducing the U-2 engine noise to a level which would permit operating essentially undetected at night in the various environments. A comparison between baseline low altitude sound measurements obtained in flight and ground observed sound measurements with noise reduction devices installed indicate a very significant noise reduction at the frequencies normally perceived by the human ear.

25X1

Next 3 Page(s) In Document Exempt

Approved For Release 2002/08/12 : CIA-RDP33-02415A000800020004-6

6447-69
~~9001-69~~ 25X1

2. Snow Survey Study - The missions for this study were completed during the week of 23 June 1969. These missions were requested by Environmental Science Services Administration, Department of Commerce, through COMIREX. A total of 14 successful missions were flown to meet the requirement.

II. GENERAL

25X1 A. [redacted] - Four sorties were flown in support of an Office of Research and Development continuing earth resources survey.

B. RED DOT - Film Testing - Four missions were flown in support of IDEALIST and other programs, as well as the general intelligence community for determining usefulness of various films and filters under operational conditions.

[redacted] 25X1

III. PILOTS AND AIRCRAFT STATUS (AS OF 30 JUNE 1969)

DETACHMENT "G" (EDWARDS AFB - NORTH BASE)

Aircraft 3 U-2C/G*
4 U-2R*

[redacted] 25X1

Aircraft 2 U-2R

Pilots [redacted] 25X1

25X1 [redacted]

6447-69
~~6001-69~~

25X1

25X1

OPERATIONALLY READY
(STANDBY STATUS)

* #348G, #051R, #053R operating from Palmdale during runway repair at Edwards AFB. 055R at LAC for update.

NOTE: NRO approval to maintain one U-2C/G for flying received, remaining U-2C/G aircraft to be placed in flyable storage.

25X1

25X1